THESIS: The Relationship between 24 hr. Central Ambulatory Blood Pressure and Arterial Stiffness

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The relationship between blood pressure and arterial stiffness is complex and remains incompletely understood. This study aimed to examine the relationship between 24 hr. central ambulatory blood pressure (cAMBP) and arterial stiffness. 24 apparently healthy participants, classified as normo-tensive, or treated or untreated hypertensive, were included. Mean was age was 60.8 $\pm$ 9.1 years. Pearson's correlation equation was used to determine the relationship between 24 hr cAMBP and arterial stiffness, with $P< 0.05$ set for significance. Positive relationships were found between aortic stiffness and 24 hr. cPP, and night-time bSBP, cSBP, bPP, and cPP. Negative relationships were found between resting augmentation index and 24 hr, daytime, and night-time bSBP, cSBP, and bPP. These findings show that aortic stiffness is associated with 24 hr. cPP and night-time hemodynamics, supporting the use in monitoring ambulatory central blood pressures to better understand the relationship between aortic stiffness and CVD risk.